

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application.

1. (Original) A method of preparing an ethylene polymerization catalyst, comprising:

- (a) (a1) reacting magnesium halide with alcohol in the presence of a hydrocarbon solvent,
- (a2) reacting the resulting product solution from the step (a1) with dialkylmagnesium, and
- (a3) reacting the resulting product from the step (a2) with alkyl halide or silane halide, to give a magnesium complex;
- (b) reacting the magnesium complex with a titanium compound, to give a magnesium-titanium complex; and
- (c) reacting the magnesium-titanium complex with an electron donor.

2. (Original) The method as set forth in claim 1, wherein the magnesium halide is a compound represented by a formula of MgX_2 , in which X is a halogen element belonging to Group VII in the periodic table.

3. (Original) The method as set forth in claim 1, wherein the alcohol is a compound represented by a formula of R^1OH , in which R^1 is an alkyl radical having 1 to 10 carbons.

4. (Original) The method as set forth in claim 1, wherein the dialkylmagnesium is a compound represented by a formula of MgR^2R^3 or $MgR^2R^3\cdot(AIR^4_3)$, in which R^2 , R^3 and R^4 , which are the same or different, respectively are an alkyl radical having 1 to 10 carbons.

5. (Original) The method as set forth in claim 1, wherein the alkyl halide is a compound represented by a formula of R^5X , in which R^5 is an alkyl radical having 1 to 5 carbons, and X is a halogen element belonging to Group VII in the periodic table.

6. (Original) The method as set forth in claim 1, wherein the silane halide is a compound represented by formula of $R^5_mSiX_{4-m}$, in which R^5 is an alkyl radical having 1 to 5 carbons, X is a halogen element belonging to Group VII in the periodic table, and m is an integer ranging from 0 to 3.

7. (Currently Amended) The method as set forth in claim 1, wherein the titanium compound is a compound represented by a formula of TiX_4 , in which X is a halogen element belonging to Group VII in the periodic table, or an alkoxy radical selected from-a the group consisting of among OC_2H_5 , OC_3H_7 and OC_4H_9 .

8. (Original) The method as set forth in claim 1, wherein the electron donor is an organic acid ester compound represented by a formula of $R^6(COO)_nR^7_{\text{--}}R^8_{\text{--}}R^{\text{--}}_{n-m}$, in which R^6 is saturated hydrocarbons, unsaturated hydrocarbons, alicyclic hydrocarbons or aromatic hydrocarbons having 1 to 18 carbons, R^7 and R^8 , which are the same or different respectively

are an alkyl radical having 1 to 18 carbons, and n and m, which are the same or different, respectively are an integer of 1 or 2 ($m \leq n$).

9. (Original) The method as set forth in claim 1, wherein the steps (a2) and (a3) are carried at -30 to 100°C.

10. (Original) The method as set forth in claim 1, wherein a molar ratio of the magnesium complex and the titanium compound ranges from 1:0.5 to 1:10 and the step (b) is carried out at -20 to 100°C.

11. (Original) The method as set forth in claim 1, wherein a molar ratio of the magnesium complex and the electron donor ranges from 1:0.01 to 1:0.5.

12. (New) The method as set forth in claim 1, where steps (a1), (a2), and (a3) are completed before performing step (b), and step (b) is completed before performing step (c).